Installation of Fencing Near High Pressure Pipelines

This **Good Practice Guide** (GPG/043) is aimed at anyone who may want to install new or replacement fencing and associated excavations within 50 metres of high pressure (HP) pipelines.

Any fencing work poses a risk to underground pipeline assets and un-notified fence post installation work has resulted in damage to HP pipelines. Pipelines are normally buried to a depth of approximately 0.9 - 1.1 metres, however older pipelines may be shallower and erosion may have reduced depth of cover. The actual depth and position of the pipeline must be confirmed under the supervision of the pipeline operator.

If any fencing work is planned within 50 metres of a HP pipeline or an Above Ground Installation (AGI), then the actual position and depth of the pipeline and/or equipment must be established on site in the presence of the pipeline operator. A safe working method must be agreed prior to any work taking place to minimise the risk of damage and ensure the final installation of fencing including posts and associated straining does not affect the integrity of the pipeline. Damage to HP pipelines can result in fire and/or explosion, environmental contamination, significant risk to the public and potential loss of fuel supplies (and consequential issues) across large areas of the country.

The hazardous nature of these pipelines is recognised in UK legislation under the Pipelines Safety Regulations 1996 (PSR 1996). This legislation ensures continued safe operation of pipelines, including prevention of damage. Failing to comply with this legislation could result in prosecution by the Health and Safety Executive.

NOTE: *There can be more than one pipeline owned by different operators at the location of a pipeline marker. Don't assume that pipelines run in a straight line between markers.*

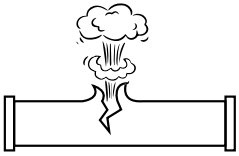
Fencing contractor injured whilst installing fencing over a medium pressure gas pipeline.

In 2022, a fencing contractor was injured whilst installing fence posts above a medium pressure gas pipeline. Luckily, this contractor was able to walk away and the learnings from this incident can be found in the **Line Search Before You Dig** (LSBUD) video.

It should also be noted that UKOPA member pipelines operate at up to 50 times more pressure than was in the pipeline that was damaged. If this incident had occurred on a HP pipeline, unfortunately the contractor would not have survived the impact and the devastation caused would have been catastrophic.

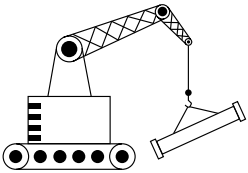
SCAN HERE TO VIEW VIDEO

230 INCIDENTS



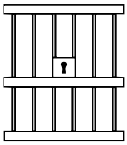
Between 2020 and 2021 UKOPA members experienced over 230 fencing related infringements (by contractors working near a HP pipeline without notifying the operator). An increase of 26% between 2020 and 2021.

REPAIR COSTS IN EXCESS OF £15m



Repairs can cost anything from £50K upwards for damage to the coating on a pipeline to in excess of £15M if there is a leak and a pipeline needs to be replaced. This does not take in to account the environmental impact of leaking product or the chaos caused, for example if jet fuel does not get transported to airports.

UP TO 18 YEARS



Under the PSR (1996) and/or the Health and Safety at Work etc. Act 1974 - people who damage pipelines could be subject to prosecution. Such is the nature of HP pipelines, that under the guidelines, anyone convicted of gross negligence (which results in the death by manslaughter) could face a prison sentence of up to 18 years.

The following should act as general guidance for installing or replacing fencing:

1. Prior to commencing any work, carry out an asset search, using such tools as LSBUD or similar. If there are any pipelines in the area contact the pipeline operator.

2. Marker posts are an indication of a pipeline but may not be placed directly above one. Please note that the pipeline does not necessarily run in a straight line between 2 posts.

3. Do not use machinery such as augers and post drivers within the vicinity of the pipeline or assets. Actual distance to be agreed with pipeline operator.

4. The use of a rock spike to create a pilot hole significantly increases the risk of pipeline damage / rupture and should not be used unless the pipeline operator is present and the route of the pipeline has been clearly established by them.

5. Only excavate near HP pipelines and assets under the supervision of the pipeline operator, or their representative.

The pipeline industry recognises normal agricultural activities such as fencing will need to take place. However, to ensure the safety of buried pipelines and associated infrastructure and of those carrying out the works, specific procedures must be followed.

What to do in an emergency

If you uncover ground near or have any contact with a HP pipeline, be that with mechanical equipment or otherwise, it is potentially a serious incident and should be treated as an emergency situation. You must:

A. Shut down all working machinery.

B. Remove all sources of ignition.

C. Remove everyone from the immediate area of the pipeline and move to a safer area upwind of the location.

D. If the pipeline is leaking dial 999 and inform the emergency services.

E. Do not attempt to seal a leaking pipeline.

F. If the leak is burning, do not attempt to extinguish the fire.

G. Contact the pipeline operator's emergency telephone number. This can be obtained either from on a nearby pipeline marker post, on all communications you will have had from the pipeline operator or on the documentation provided by the pipeline operator prior to you commencing work.

H. Follow the advice provided by the pipeline operator and let them make the situation safe.

I. Where possible keep all people and traffic well away from the location

For more information please contact:

The UKOPA website contains the company information details for all UKOPA members, visit **www.ukopa.co.uk/emergency/**

The UKOPA presentation about working safely near HP pipelines can be found at **www.ukopa.co.uk/relevant-documents-and-information** please do take a look at this and share with any staff and contractors working for you. The HSE guidance document HSG47 - Avoiding danger from underground services - is also a helpful document.

Pipeline operators are here to help, so please do contact them prior to any work taking place or if you have any queries.

SCAN HERE FOR MORE INFO ON UKOPA GUIDES

UKOPA GPG/043 (07/23)